MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2018/2019

DMA5018 – MULTIMEDIA APPLICATIONS

(For Diploma students only)

13 OCTOBER 2018
02:30 p.m. – 04:30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **5 pages**.
2. Answer **ALL** questions in **Section A** and **Section B** on the **Answer Booklet**.

SECTION A: 20 MULTIPLE CHOICE QUESTIONS (20 MARKS)

*Instruction: Write your answers in the **Answer Booklet.***

1. Type sizes are usually expressed in _____.
   A. font
   B. sizes
   C. pixels
   D. points

2. Large blank areas intentionally included in visual designs are called _____.
   A. space
   B. blank space
   C. white space
   D. empty space

3. Text that has words, sections, or thoughts that are linked together with clickable spots is called _____.
   A. button
   B. hotspot
   C. hyperlink
   D. hypertext

4. The process of converting a mathematical representation of a letter to the screen or printed output is called _____.
   A. leading
   B. rendering
   C. compiling
   D. rasterising

5. A(n) _____ is defined as the reference from one document to another document, image, sound or file on the Web.
   A. node
   B. chunk
   C. anchor
   D. module

6. How many different colours is a 16-bit image capable of representing?
   A. 16
   B. 256
   C. 65,536
   D. 16,772,216

7. In computer displays, colours are created by combining coloured light sources in three primary colours: red, green, and blue. The colour model is called as _____.
   A. colour
   B. additive colour
   C. subtractive colour
   D. screen-specific colour

Continued...

8. The blocky, jagged appearance that occurs when a bitmapped image is resized is called _____.
   A. pixelation
   B. rasterizing
   C. compression
   D. multiplexing

9. Which of the following colour model **BEST** describes for statement below?

Colour is specified as an angle from 0 to 360 degrees on a colour wheel.

   A. RGB
   B. HSB
   C. YUV
   D. CYMK

10. _____ is a process whereby the colour value of each pixel is changed to the closest matching colour value in the target palette.
   A. Dithering
   B. Morphing
   C. Rendering
   D. Autotracing

11. Animation programs typically allow animators to completely draw specific frames and then automatically fill in between those frames. These specific frames are called _____.
   A. tween
   B. frames
   C. tweening
   D. keyframes

12. Animation that moves objects in the flat Cartesian x and y axes of the screen, is animation in _____ space.
   A. 2 D
   B. 2 ½ D
   C. 3 D
   D. 4 D

13. The HTML5 specification includes animations built within a(n) _____ file.
   A. .css
   B. .jpg
   C. .swf
   D. .svg

Continued...

14. Some animation programs allow the animator to create a trail between two points and then animate an object along that trail. This type of animation is called _____.
    A. morphing
    B. kinematics
    C. cel animation
    D. path animation

15. What is the extension of an Adobe Flash project that has been compiled for playback?
    A. .fla
    B. .svg
    C. .dcr
    D. .swf

16. The applications that run on a user's personal computer and provide the interactive graphical interface for viewing web pages are called _____.
    A. tags
    B. applets
    C. daemons
    D. browsers

17. A local area network (LAN) can be connected to other LANs to form a(n) _____.
    A. wide area network
    B. web hosting company
    C. Internet service provider
    D. internet

18. Programs that run within a browser and allow users to view and interact with files within the browser's window are called _____.
    A. nibbles
    B. plug-ins
    C. web browsers
    D. multimedia players

19. Which of the following statements is **TRUE** for HTML?
    A. Document used to format and deliver web pages using styles.
    B. Rules for a simple transaction between two computers on the Internet.
    C. Document format for presenting structured text mixed with inline images.
    D. Protocol for linking multiple documents located on computers anywhere within the Internet.

20. What does the Domain Name Server (DNS) system do?
    A. It compresses and decompresses data on servers.
    B. It assigns domain names and IP addresses to computers.
    C. It dynamically distributes IP addresses to computers on a LAN.
    D. It makes the connection between MIME-types and applications.

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SECTION B: 4 STRUCTURED QUESTIONS (80 MARKS)

*Instruction: Write your answers in the **Answer Booklet.***

QUESTION 1 (20 MARKS)

a) Discuss the following terms:

i) Baseline [2 marks]
ii) Tracking [2 marks]
iii) Kerning [2 marks]
iv) X-height [2 marks]
v) Descenders [2 marks]

b) Briefly explain the advantages and disadvantages of vector images over bitmap images.

[10 marks]

QUESTION 2 (20 MARKS)

Mey is a newbie animator in one company called Mims Production. She was assigned to create a 2D animation advertisement for product commercial. You as a senior animator in the company will be a mentor for her first project.

a) Explain to Mey the steps that she must follow in creating animation.

[8 marks]

b) Suggest **FIVE (5)** animation tools that Mey can use to create an animation for this project.

[5 marks]

c) Discuss on how to design and develop an effective multimedia project for the web.

[7 marks]

Continued...

QUESTION 3 (20 MARKS)

You are participating in developing a multimedia product commercial project. You are assigned as a sound editor for the project. You are also required to prepare a report that explains the process of producing the sound for this project.

a) Briefly explain **FIVE (5)** sound editing operations for this project.

[10 marks]

b) Calculate the audio file size in megabyte for stereo digital recording, 1 minute and 5 seconds recording at 44.1 k Hz and 16-bit resolution.

[10 marks]

QUESTION 4 (20 MARKS)

a) Differentiate between interlacing and progressive scan technologies in video display.

[5 marks]

b) A video stream with 25 frames per second playback rate and an audio stream of stereo voice channel. If each frame consists of 320 X 240 pixels of 24 bit colours depth and the audio is sampled at 44.1 kHz with 16 bit sampling. Calculate the total storage required in gigabytes to store the above video file for eleven minutes.

[15 marks]

End of Page.